



Case Study

How AMD Global Telemedicine Improved Software Release Efficiency by 800% With Massdriver

Business Challenge

Scale 10-100x Rapidly

Massdriver played a crucial role in supporting AMD Global Telemedicine as they modernized their cloud infrastructure to seize new business opportunities. With three decades of experience, AMD Global Telemedicine offers essential telemedical technology services across 100 countries on 6 continents. Their software suite enables fast, accurate diagnoses, making uptime, reliability, performance, and security vital.

Facing two strategic partnerships, AMD Global Telemedicine anticipated a workload surge of 10 to 100 times their current capacity. Their existing infrastructure management approach, using Chef and AWS tools, was time-consuming and required significant engineering effort. Augmenting their DevOps talent to maintain this approach would be costly. They needed an efficient and scalable solution to meet the upcoming demands while optimizing resources for critical areas like product development.

Buying Decision & Solution

Scaling Without Hiring

To find a solution, AMD's chief innovation officer, Chip McIntosh, explored the AWS Marketplace and Gold Partners. However, the available products fell short of their needs, often providing incomplete solutions or relying on costly retainer-based staffing models. AMD sought a solution that could empower their existing staff without increasing their engineering workforce.

In August 2022, Chip discovered Massdriver [through a TechCrunch Startups article](#). Recognizing its potential, AMD Global Telemedicine arranged a meeting with Massdriver for a low-risk proof-of-concept. The objective was to clone a portion of their existing environment within Massdriver's platform and assess its viability for managing their infrastructure at the projected scale.

Implementation

Proof of Concept in Less than 10 Hours

The evaluation of Massdriver was managed as a background task to avoid disrupting regular business operations. By leveraging official Massdriver bundles, AMD set up their core infrastructure, including the VPC network, EKS Cluster, SQL database, and Redis cache, in less than 2 hours. In total, it took less than 10 hours of engineering effort to recreate AMD's infrastructure and applications within Massdriver.

The successful proof of concept confirmed Massdriver as a viable solution to AMD Global Telemedicine's infrastructure management challenge. The decision was made to fully migrate their complete production and staging environments to Massdriver.

Results & Benefits

An 89% Reduction in Software Release Effort

The adoption of Massdriver by AMD Global Telemedicine brought significant results and benefits, with a focus on software release processes and infrastructure management. Key outcomes included:

Streamlined Software Release Process

Massdriver had a significant impact on the software release process at AMD Global Telemedicine. Previously, the blue/green deployment strategy required replication of infrastructure and involved a lengthy cutover process after QA approval. This process required the involvement of three engineers for three or more hours. After adopting Massdriver, the deployment process became remarkably efficient, requiring just one engineer for less than an hour, resulting in an impressive 89% reduction in engineering time. This time savings was achieved through:

Adoption of Kubernetes

Massdriver facilitated the adoption of Kubernetes as the runtime environment, enabling faster rollouts, rollbacks, and consistent software deployment across environments.

Parity and Confidence

Massdriver enforced environment parity between staging and production, boosting QA testing confidence and reducing testing efforts. Test environments now mirrored the production setup, ensuring consistency.

Single-Click Deployment

Massdriver's single-click deployment leveraged Kubernetes health checks and rollout strategies to safely deploy without the need for full blue/green environment replication.

Time Savings and Increased Productivity

The burden of infrastructure management and software releases primarily fell on Zachary Huera, AMD's principal software architect. Previously, infrastructure management consumed an estimated 15% of his valuable time, which limited the engineering teams' ability to quickly deliver features and fixes. After adopting Massdriver, Zac now spends less than 3% of his time managing infrastructure. This recovered time has led to an increase in velocity across the engineering team as Zac is able to spend more time on project management and enabling engineers.

Improved System Understanding and Communication

Massdriver's visual interface, along with health indicators and alarms on infrastructure, provided AMD Global Telemedicine with a clearer understanding of their systems and dependencies. This enhanced visibility enabled better communication and collaboration among teams, improving overall system comprehension and troubleshooting capabilities.

“

By using Massdriver, we've experienced a 9x increase in productivity related to infrastructure management and product releases.

Chip McIntosh,
Chief Innovation Officer

Conclusion

Scalability Achieved and Business Captured

The successful adoption of Massdriver proved transformative for AMD Global Telemedicine. The company achieved faster and less burdensome software releases, improved infrastructure and software automation, greater visibility into infrastructure and application health and dependencies, and autoscaling of applications and infrastructure, all while reducing the demand on critical engineering staff. Overall, Massdriver played a critical role in enabling AMD Global Telemedicine to navigate their imminent scalability challenge, and capture new business opportunities.

“

Massdriver is the only working, automated best practices, infrastructure deployment and management solution I've ever seen for cloud services. You do everything you promise. Everything works.

Chip McIntosh,
Chief Innovation Officer

Scale Your Engineering Team with Confidence

Contact us at luis@massdriver.cloud
Visit our website massdriver.cloud